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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,322	09/24/2003	Yves Savidan	040388-0125	7927
22428 7590 03/12/2007 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007				
			EXAMINER KUBELIK, ANNE R	
			ART UNIT 1638	PAPER NUMBER
			MAIL DATE 03/12/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

TH

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/668,322

Applicant(s)

SAVIDAN ET AL.

Examiner

Anne R. Kubelik

Art Unit

1638

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 08 February 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☒ The Notice of Appeal was filed on 08 February 2007. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.

Continuation of 11. does NOT place the application in condition for allowance because:
First, Applicant refers to paragraph numbers, but the paragraphs in the specification are not numbered. Examiner did her best to estimate to which paragraphs Applicant is referring.

112, 1st, written description (new matter):

Applicant urges that the definition of orthologous genes in ¶21 indicates that it may be identified in any plant. That is not found persuasive. It is presumed that Applicant is referring to the paragraph spanning pg 6-7. In that paragraph an orthologous gene is one that diverged from a common gene. This refers to the gene, not the species; the specification does not describe which plant species have a gene orthologous to that in maize, but ones whose apomixis gene is not orthologous to that in maize are excluded. This similarly applies to the other references to orthologous genes.

112, 1st, written description:

Applicant urges that the application discloses molecular markers from maize and tripsacum, including umc28, csu68, and umc 62 in ¶28 and ¶40-47 and example 2 discloses a method for identifying maize sequences orthologous to the tripsacum sequence. That is not found persuasive. umc28, csu68, and umc 62 do not describe the full scope of markers linked to apomictic or diplosporous development. Further, the full scope of steps required to practice the claimed method is not described.

Applicant urges that they need not provide the structural and functional features that distinguish the nucleic acid from others, all they need to do is provide a means for identifying them. That is not found persuasive. Nucleic acids that map the mutations must be described, as must the steps required to clone the genes, to select an orthologous segment and verify that it confers apomictic or diplosporous development by creating a loss-of-function mutation. For example, Applicant has no idea of how many mapping steps it would take to clone the genes.

112, 1st, enablement:

Applicant urges that as long as at least one method for making the invention is disclosed, then enablement is satisfied; because molecular markers from maize and/or tripsacum that can be used are taught, the full scope of the invention is enabled. That is not found persuasive because umc28, csu68, and umc 62 are not linked to the full scope of apomictic or diplosporous development genes in maize.

Applicant urges that it is irrelevant the literature search fails to identify any literature that describes apomixis genes cloned by the present method and the art rejection contradicts the enablement rejection; this is an improper squeeze, citing an exhibit that was not sent. That is not found persuasive. The literature search is relevant because it shows the state of the art, 8.5 years after filing; the state of the art indicates that the claimed invention is not enabled. The exhibit could not be considered because Applicant did not provide a showing of good and sufficient reasons of why it was necessary and not earlier presented, and because it was not sent.

103 over Kindiger:

Applicant urges that even if it were obvious to transposon tag a gene, the invention is not obvious because Kindiger does not teach or suggest identifying and cloning a sequence conferring an apomictic phenotype by creating and analyzing a loss-of-function mutation. That is not found persuasive. Kindiger et al tagged a mutation with the Mu transposon, thus creating a loss-of-function mutation (column 12, line 42, to column 13, line 22; column 20, lines 49-58). Kindiger et al suggests cloning the gene in column 12, line 42, to column 13, line 22. See *Altiris Inc. v. Symantec Corp.*, 318 F.3d 1363, 1371, 65 USPQ2d 1865, 1869-70 (Fed. Cir. 2003) (Although the specification discussed only a single

embodiment, the court held that it was improper to read a specific order of steps into method claims where, as a matter of logic or grammar, the language of the method claims did not impose a specific order on the performance of the method steps, and the specification did not directly or implicitly require a particular order).

103 over Leblanc:

Applicant urges that the Office admits Leblanc does not disclose cloned genes or creation of a loss-of-function mutation, and urges that Leblanc does not teach or suggest identifying and cloning a sequence conferring an apomictic phenotype by creating and analyzing a loss-of-function mutation. That is not found persuasive. One of ordinary skill in the art would have been motivated to do so because of the suggestion of Leblanc et al to clone the gene (pg 1199, left column, paragraph 1). One of skill in the art would complement the mutation with the cloned gene to confirm that the gene restores the function to the plant.



ANNE KUBELIK, PH.D.
PRIMARY EXAMINER